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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,877	12/09/2003	Darren A. Janzig	1023-335US01	4792
28863	7590	11/01/2005	EXAMINER	
SHUMAKER & SIEFFERT, P. A. 8425 SEASONS PARKWAY SUITE 105 ST. PAUL, MN 55125			GREENE, DANA D	
			ART UNIT	PAPER NUMBER
			3762	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

T: m

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,877	<b>Applicant(s)</b> JANZIG ET AL.	
	<b>Examiner</b> Dana D. Greene	<b>Art Unit</b> 3762	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/29/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, 15-27, and 29-35 stand rejected under 35 U.S.C. §102(b) as being anticipated by Pless et al. (US 6,597,954 B1, hereinafter "Pless"). Pless is considered to disclose:

a plurality of integrated circuits (see col. 7, ln. 55-60, col. 11, ln. 54-60, and col. 13, ln. 55-60, Pless). The disclosed electronic circuitry is considered to anticipate the claimed plurality of integrated circuits because both groups are configured to fit the contours of the cranium with the components arranged to fit within the concave space provided by the interior of the housing/module;

a plurality of discrete components (see col. 17, ln. 20-35 and col. 18, ln. 1-10, Pless). The disclosed switching circuitry and capacitors are considered to anticipate the claimed plurality of discrete components because all are capable of being coupled to a circuit board and are located on a specific place with reference to the board;

a circuit board that is coupled to each of the integrated circuits and discrete components ( see col. 18, ln. 40-65, Pless). The disclosed circuit board is considered to anticipate the claimed circuit board because both carry the integrated circuits and discrete components within the housing and provide the capacity for the integrated

circuits and/or discrete components to be arranged on the circuit board according to height to better conform to the concavity of the housing;

a housing to house the circuit board (see col. 7, ln. 50-62, Pless). The disclosed outer housing is considered to anticipate the claimed housing because the circuitry within both devices is protected by an outer covering/housing. In this connection, the disclosed housing is considered to anticipate the claimed housing because both configurations allow for the circuit board within the housing to carry integrated circuits and discrete components;

wherein the circuit board comprises first and second surfaces, each of the integrated circuits is located on the first surface, and each of the discrete circuit components is located on the second surface (see col. 13, ln. 20-45, Pless). The disclosed input side is considered to anticipate the claimed first surface and the site of electrode coupling is considered to anticipate the claimed second surface because both combinations form the various components of the control module and placement on opposite sides enable the components to better conform to the concavity of the housing;

Wherein at least one of the integrated circuits and discrete components are arranged on the respective one of the first and second surfaces to substantially conform to a predetermined non-linear profile (see col. 6, ln. 50-65, Pless). Pless is considered to disclose a device configured to fit the contours of the patient's cranium. The disclosed contoured profile is considered to anticipate the claimed non-linear profile because both configurations provide a better conformation to the concavity of the housing.

With reference to claims 3-5, 7, 22, Pless is considered to disclose:

a circuit board (see abstract, col. 7, ln. 55-60, col. 11, ln. 54-60, and col. 13, ln. 55-60, Pless). The disclosed electronic circuitry is considered to anticipate the claimed plurality of integrated circuits because both groups are configured to fit the contours of the cranium with the components arranged to fit within the concave space provided by the interior of the housing/module;

a telemetry coil that encircles the circuit board (see col. 7, ln. 55-65, Pless). The disclosed telemetry coil is considered to anticipate the claimed coil because both may be provided outside of the housing to facilitate communication;

a housing to house the circuit board and the telemetry coil (see col. 7, ln. 50-62, Pless). The disclosed outer housing is considered to anticipate the claimed housing because the circuitry within both devices is protected by an outer covering/housing. In this connection, the disclosed housing is considered to anticipate the claimed housing because both configurations allow for the circuit board within the housing to carry integrated circuits and discrete components;

wherein the circuit board is located substantially within a first plane and the telemetry coil is located substantially within a second plane, and the first and second planes are substantially parallel (see figure 2, Pless).

Referring to claim 19, Pless is considered to disclose an implantable medical device, wherein the housing comprises a first housing, the implantable medical device further comprising a second housing that houses a power source that provides power to the integrated circuits and the discrete components (see col. 13, ln. 54-60, Pless). The

Art Unit: 3762

battery power source of Pless is considered to anticipate the claimed power source because both provide power to the components of the existing and other modules.

Referring to claims 30-31, Pless is considered to disclose an implantable neurostimulator and a device that delivers stimulation to the brain of the patient (see col. 5, ln. 58-61). The neurostimulator of Pless and the claimed neurostimulator both deliver stimulation signals to the brain tissue.

With reference to claims 32-35, Pless is considered to disclose an implantable medical device comprising a housing that includes a major surface and a feedthrough that is oriented at an angle relative to the major surface (see col. 7, ln. 23-35, Pless). The disclosed lead connector is considered to anticipate the claimed feedthrough because both allowing components within the housing of the implantable medical device to be coupled to one or more electrodes, sensors, or the like located outside the housing while maintaining the hermeticity of the housing.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 and 28 are rejected under 35 U.S.C. §103(a) over Pless in view of Scharf (US 6,330,468, hereinafter "Scharf"). Pless is considered to disclose the claimed invention as discussed above, under the anticipatory rejection, except for the claimed flex tape component. However, Scharf is considered to disclose the claimed flex tape

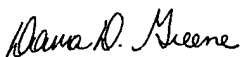
configuration (see col. 9, ln. 8-20, Scharf). It would have been obvious to one of ordinary skill in the art to combine the teachings of Pless with the fiberglass circuit board material disclosed in Scharf for the purpose of constructing a circuit board with easy concavity facilitation.

**Conclusion**

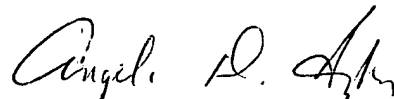
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana D. Greene whose telephone number is (571) 272-7138. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dana D. Greene



ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700